



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/301,811	04/28/1999	JOHN R. HURST	242/044	6113

7590 07/28/2003

ARENA PHARMACEUTICALS, INC
6166 NANCY RIDGE DR.
SAN DIEGO, CA 92121

EXAMINER

ALLEN, MARIANNE P

ART UNIT	PAPER NUMBER
----------	--------------

1631

19

DATE MAILED: 07/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/301,811

Applicant(s)

HURST ET AL.

Examiner

Marianne P. Allen

Art Unit

1631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,10-33 and 37-45 is/are pending in the application.
- 4a) Of the above claim(s) 37-45 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 is/are allowed.
- 6) ☒ Claim(s) 10-33 and 37-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1, 10-33, 37-45 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Applicant's arguments filed 5/2/03 have been fully considered but they are not fully persuasive.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Election/Restrictions

Claims 37-45 remain withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Information Disclosure Statement

The Information Disclosure Statement submitted 2/24/03 has not been considered as it was not accompanied by the appropriate certification or fee.

Claim Rejections - 35 USC § 112

Claims 10-33 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This is a new matter rejection.

Independent claims 10 and 23 are not originally filed claims and have been substantively amended since their first introduction.

Applicant has not pointed to page and line number in the **specification for each of the limitations in these claims** to demonstrate contemplation of the invention as is now claimed. This was requested in the prior Office action. Statements such as the "entirety of the

specification" are not helpful. Failure to point to basis for each of the claims and all limitations in the next response will be considered non-responsive.

Support for the claims is not seen for **at least** the following reasons.

Claim 10 requires identifying a "target item." Applicant's arguments and claim 10 as amended appear to be using the term "item" in a very strict sense to refer to a column or attribute in a table. This is distinct from the concept of identifying a "target compound" as set forth in Figure 6 and on page 30, lines 4-5, which could have many items (e.g. toxicity, molecular weight, structure) associated with it in the row or record of a database table. The specification discloses methods of retrieving information about compounds similar to the identified target compound based on the property metrics of the target compound. While page 14 discloses applying the method broadly to other areas such as health trends, it is not known what a target item is in the context of such areas as health trends, polling trends, etc. As such, the specification does not disclose the invention in the broad terms recited by the claims. There does not appear to be any disclosure of identifying a target item in the sense applicant is arguing in the context of the claimed method outside of target compounds.

In addition, while applicant argues that a neighborhood range is not required for claims 10 and 23, this is not agreed with. The originally filed claims as well as the entirety of the specification, including page 30, make clear that a neighborhood range is input or that a predefined neighborhood is used to determine similarity. Neither of these concepts is present in the claims and there is no disclosure of determining similarity in its absence.

Claims 27-28 recites that a neighborhood effect is the property. The specification discloses that a neighborhood effect can exist for a particular property but does not appear to

Art Unit: 1631

disclose a neighborhood effect as a property itself. (See page 10, lines 10-15.) The specification does not appear to provide support for this claim.

Claims 10-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10 is confusing in reciting a "plurality of database tables" in the preamble and in line 3; however, only the first and second database tables are included within the method steps for the fuzzy similarity join. It is unclear how any additional database tables are used by the method.

Claim 11 is confusing in reciting the target item is a chemical compound. As argued by applicant, an "item" is a particular property such as structure or name. This claim language appears to use target item as meaning target compound. See also claims 20-22.

Claims 14-15 are confusing in reciting that a plurality of target items are identified. These claims appear to be improperly dependent as claim 10 is directed to a single target item and the fuzzy similarity join is with respect to the single target item. It is further unclear if these claims intend iterative fuzzy similarity joins on each target item individually or a single fuzzy similarity join based on the set of target items. Note that the target items do not have to be associated with a single chemical compound (see claim 11). Claim 16 is likewise confusing in reciting "plurality of target items."

Claim 19 is confusing as it is unclear if the rows are eliminated before or after the fuzzy similarity join. If it is after as the language implies, the information retrieved will still contain the non-desired items. Claim 32 is likewise confusing.

Claim 33 is confusing in reciting a single target property is selected from "one or more attributes (columns)." It is unclear whether one or more than one property is being selected.

Claim 26 is unclear in reciting that a "plurality of target properties" are identified. Claim 23 is directed to a single target property and the chemical similarity join is with respect to this property. It is unclear if the claims intend iterative chemical similarity joins on each target property or a single chemical similarity join based on the set of target properties for the target chemical compound.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

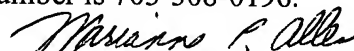
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 1631

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marianne P. Allen whose telephone number is 703-308-0666. The examiner can normally be reached on Monday-Friday, 7:00 am - 1:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on 703-308-4028. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3014 for regular communications and 703-305-3014 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.


Marianne P. Allen
Primary Examiner
Art Unit 1631

mpa
July 24, 2003